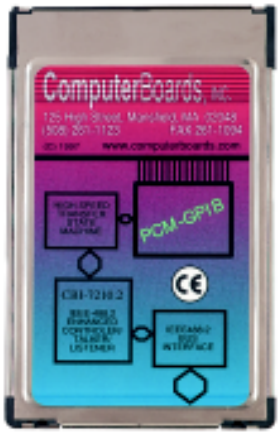
PCM-GPIB

Highest Performance IEEE-488.2 Interface and Driver Software for PCMCIA Bus Computers



Features

IEEE 488.2 Standard interface
Complete Talker/Listener/Controller
Uses the new industry standard CB7210.2
Industry Standard 16 Bit PCMCIA Bus
Data transfer rates over 1Mega bytes/sec
REP-INSW block transfer
1024 Word FIFO buffer
High Speed State Machine Bus Manager
RF shielded IEEE-488 cable connector
Transparent interrupt enabling/disabling

Includes GPIB-Library complete software support

DESCRIPTION

The PCM-GPIB IEEE-488 interface converts any PCMCIA bus personal computer into an instrumentation control and data acquisition system. Connect up to 14 instruments using standard IEEE-488 cables such as the C488-2M, 2 meter IEEE-488 interface cable. The PCM-GPIB is designed around the new industry standard CB7210.2 GPIB chip.

Greater than 1MB/s Transfer Rates

The PCM-GPIB transfers data over the GPIB at rates in excess of 1 million bytes per second using the maximum IEEE-488 specification cable length (2 meters times the # of devices). A 1024 Word FIFO buffer and the advanced REP-INSW ISR transfer method provide all the horsepower required to achieve the highest possible rates.

Controlled by ComputerBoards' advanced High Speed State Machine Bus Manager, the CB7210.2 and FIFO buffer are able to absorb all the information coming from the highest speed instruments. The high speed state machine provides byte-to-word packing and unpacking and since words carry twice the information bytes do, packed data requires fewer bus cycles to transfer the same GPIB information.

Worried that you may need more than 1.5MB/s? Consider that Hewlett-Packard, the worlds largest instrument manufacturer, does not manufacture an instrument that transfers data over the GPIB at greater than 800KB/s! The PCM-GPIB is more than fast enough for any application.

IEEE-488.2 (GPIB) Compatibility

The PCM-GPIB adheres to ANSI/IEEE Standard 488-1978. Often referred to as the IEEE-488.2 bus, GPIB bus or HP-IB bus, the GPIB is a standard for instrumentation communication and control for instruments from manufacturers the world over. The GPIB provides handshaking and interface communications over an 8 bit data bus employing 5 control and 3 handshake signals.

Equipped with a PCM-GPIB, a laptop computer can:

Control GPIB instruments.
Gather data from GPIB test equipment.
Become a data acquisition station in a GPIB system.

Plug & Play - No switches or jumpers

The PCM-GPIB is true plug and play. Plug in the PCM-GPIB and run the installation software then take measurements. The Plug and Play specification is a standard for system configuration of boards and software which automatically configures the address and interrupt level of the PCM-GPIB. Note, the PCM-GPIB does not use DMA in favor of the superior REP-INSW high speed transfer.

The circuitry and software required for the PCMCIA standard implements identification, configuration, conflict detection and resolution. ComputerBoards uses the industry standard PCMCIA interface method to implement plug and play.

Windows 95, Windows 3.1 and DOS Compatibility

The PCM-GPIB hardware supports all the operating systems and languages. The installation software will manage resources for you on non-plug and play systems. The free software does not include Card & Socket Services as most modern systems are equipped with C&SS. If you need C&SS, or are unsure, call please.

Specifications

The PCM-GPIB is compatible with IEEE-488.1 and IEEE-488.2 specifications.

Transfer Rate	>1Mbyte/sec
Power	5VDC @ 150mA Typical
Dimensions	PCMCIA Type II
I/O Connector	33 pin to IEEE-488 Standard
Operating Temp. & Hum.	0-50 Degrees C @ 10-90%
Storage Temp. & Hum.	-55 to 125 Degrees C @ 5-90%